

A New Concept in Burn Care

A new product, developed by the Sierracin Corporation in conjunction with the Sherman Oaks Community Hospital Burn Unit, is the Apollo Cover. It is a plexiglass shield which is placed over the patient's bed or crib. This shield is connected to the patient with a cutaneous thermostat which regulates the temperature surrounding the patient through a system of micro-circuitry. It has been used to great advantage, as it has shown to cut down the evaporative water loss by approximately 50 percent and to decrease the basal metabolic rate by 60 percent. This conservation of energy greatly enhances the care of the patient. It is no longer necessary for the patient being treated under the open or semi-open method to be contained in a cowl apparatus made of bed sheets over metal supports. With the Apollo Cover, a child can roam freely in a crib without fear of burn from the low energy heat from the cover.

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A Changed Medical View of "Cleft Palate Speech"

Cleft palate speech should no longer be viewed as a sad state and the patient referred to a speech therapist without medical investigation into the cause of the condition. Recent improvements in diagnosis and surgical treatment of cleft palate speech should cause insistence that anyone bearing this communication stigma be investigated and an intelligent prognosis and therapeutic recommendation be obtained. For some, speech therapy is the answer; for others, speech therapy alone compromises the patient's future by delaying appropriate surgical treatment and allowing the development of unbreakable bad compensatory speech habits.

A characteristic speech pattern occurs in pa-

tients with unrepaired cleft palates and in about 20 to 30 percent of patients who have had a repair of palate cleft. It also occurs in a significant number of persons who do not have cleft palate but have ill-defined anatomic disproportions of the palate-nasopharynx relationship or equally ill-defined neuromuscular disorders.

The primary cause of cleft palate speech is the inability to close the palato-pharyngeal valve mechanism. A mobile soft palate can close against the nasopharynx and thus redirect the vocalized air stream to produce specific consonants requiring intraoral pressure. An inadequate palate-to-pharynx contact (palato-pharyngeal incompetence) results in a recognizable hyperresonant voice (hypernasality) and compensatory distorted articulation. The cumulative speech pattern we identify as cleft palate speech.

Investigation of the anatomy and function of the palate should include lateral cine-X-ray.

Surgical treatment establishes a more functional relation between the palate and pharynx. A short palate can be lengthened and moved closer to the pharynx ("pushback"). A large pharynx can be made smaller and brought closer to the palate by pharyngoplasty or retropharyngeal implantation of cartilage or Silastic®. The large size can be abruptly worsened by adenoidectomy. Another method is to elevate a pharyngeal flap of mucous membrane and muscle and insert it into the palate. The flap partially occludes the nasopharynx and redirects the air stream into the oral cavity. The authors find predictably good results from a palate lengthening procedure combined with a superiorly based posterior pharyngeal flap. This combines advantages of each technique. Other procedures are occasionally employed for individual problems.

The results of palate or pharyngeal reconstruction are usually quite beneficial, although a minority of individuals still require speech therapy following surgery. When required, however, speech therapy is more effective with a surgically improved palate and pharynx.

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